

DATASHEET

# High Density Aggregator TAP with (4) Copper TAPs

1U Half-Rack Aggregating TAP for OT Networks.



The High Density Aggregator TAP with (4) Copper TAPs gives ICS / OT cybersecurity engineers and specialists the capability to tap up to four (4) network segments and aggregate traffic to 1 or 2 monitoring ports. Physical hardware separation inside the network TAP guarantees unidirectional traffic between network segments and the connected out-of-band sensors protecting against inbound cyber threats. It is impossible for data to flow from the sensors to the network via the monitoring ports in the TAP because of its hardware-based Data Diode design. Additionally, built-in failsafe ensures the network connections remain live if the TAP loses power. A durable metal chassis makes this TAP ideal for deployment in with speeds of 10/100/1000M and RJ-45 Copper connections, especially OT networks where space is a premium.



- Simple set-up with menu prompts to configure
- Lightweight, 1U Half-Rack form factor - great for L1 and L2 placement

#### **SECURE**

- Failsafe
- Hardware Data Diode design
- No IP or MAC address

#### **PRACTICAL**

- Affordable pricing
- 3 TAP Modes: Aggregation, Breakout, Regeneration
- Wired DC Power is available

#### CERTIFICATIONS

- RoHS3
- REACH
- POP
- UL, CE, CSA
- TAA compliant
- Country of Origin: USA
- MTBF is 150,000+ hours

## **Ordering Information**

Product Name	Part #	Product Description
High Density Aggregator TAP with (4) Copper TAPs - AC Power	INT1G10CSA	Aggregator TAP - Copper High Density: 410/100/1000M Copper TAPs, with 21G SFP Cage Monitoring Ports, Serial Port Mgmt, Internal Dual AC PS
High Density Aggregator TAP with (4) Copper TAPs - DC Power	INT1G10CSA-DC	Aggregator TAP - Copper High Density: 410/100/1000M Copper TAPs, with 21G SFP Cage Monitoring Ports, Serial Port Mgmt, Internal Dual DC -48vdc PS



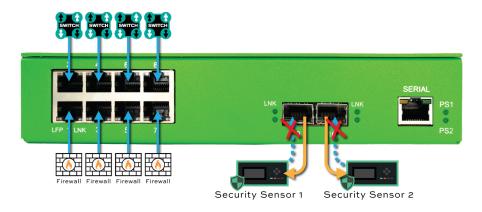
## **Deployment Benefits**

## **Network TAP**

- INT1G10CSA has four (4) RJ-45 Copper TAPs.
- Engineered for 10/100/1000M network speeds.
- The following network ports are paired inside the TAP: 1&2, 3&4, 5&6, 7&8.
- Ports 9 and 10 are built for SFP transceivers giving flexibility connecting to out-of-band sensors.
- Failsafe circuitry is built into the 4 Copper TAPs. Each pair of network ports are connected. If power is lost, the relay circuitry will fail closed providing a connection between network devices. Failsafe allows traffic to continuously flow in the event of a power failure to the unit.
- Hardware data diode enforces one-way data flow.

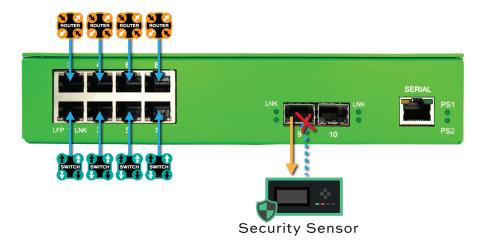
#### USE CASE 1

## TAP 4 links to 2 monitoring ports

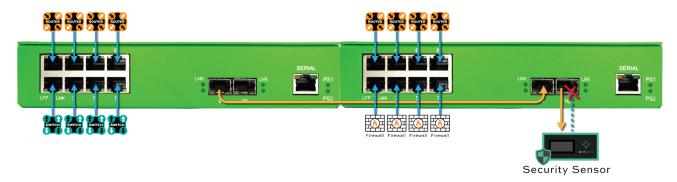


## USE CASE 2

## TAP 4 links to 1 monitoring port

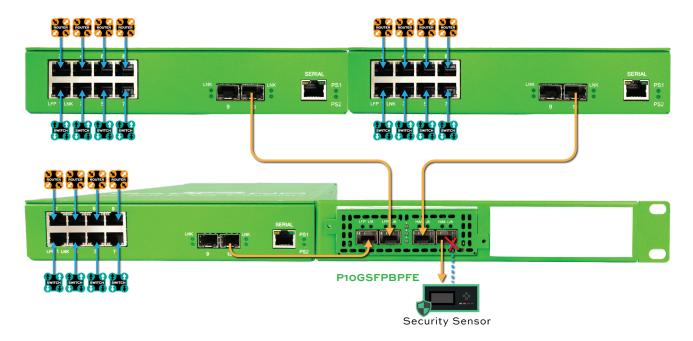


## USE CASE 3 TAP 8 Links to 1 monitoring port



This use case requires two (2) units of INT1G10CSA. First INT1G10CSA will aggregate the first four links together and send out port 9 over to port 9 on the second INT1G10CSA. The second INT1G10CSA will aggregate four additional links. The four additional links will be aggregated together with the first four links from the first INT1G10CSA for a total of eight links sent out port 10 of the second INT1G10CSA.

## use case 4 Affordable Packet Broker solution for OT Networks



This use case combines three (3) units of INT1G10CSA and one (1) unit of P10GSFPBPFE to create a cost-effective Packet Broker solution. TAP up to 12 links with the (3) INT1G10CSA and aggregate using Garland Technology's XtraTAP Portable Packet Broker. The P10GSFPBPFE can aggregate copies of multiple tapped 1G links and send all of it to a 10G OT security sensor. Bracket-10 connects to INT1G10CSA and has two (2) open slots for portable solutions like the P10GSFPBPFE. This is an ideal solution for a 2U space or when tapping 3 different segments of a network and then aggregating to a single sensor in a different location.



## **HARDWARE KEY**

- Four (4) 10/100/1000M Copper
   RJ-45 TAPs (8 Network Ports)
- 2. Two (2) 1G SFP Monitoring Ports
- 3. Serial Port
- 4. Dual Power Supplies
- 5. Power Buttons

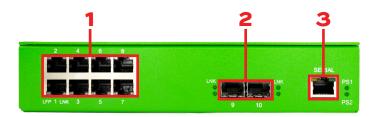
### **DIMENSIONS** (HxWxD)

1.75" x 8.35" x 17.30"

44.45mm x 212.09mm x 439.42mm

## **SPECIFICATIONS**

- Network speed: 10/100/1000M
- Storage Temperature:
  - -20°C to 70°C | -4°F to +158°F
- Humidity: 90% non-condensing
- Voltage: 90 AC 264 AC [DC voltage is 48 VDC]
- Current (nominal): 1.8 Amps at 115 AC[DC amps is 4.76 Amps DC]
- Weight: 4.0 lbs (1.81 kg)





## **PACKAGE CONTENTS**

- One (1) Aggregator TAP
- One (1) Rack mounting kit (bracket and screws)
- One (1) Ethernet Cable (RJ-45)
- One (1) Console Cable (RJ-45 to DB9)
- Two (2) AC Power Cords
  - \*If AC part # is purchased
  - \*Product comes with everything needed to install in a 1U rack.

Note: INT1G10CSA is able to work with a single power input. Best practice is using the two (2) supplied power inputs connected to separate power sources to help safeguard the device against power failure.

TIP: The (2) Monitoring Ports require SFP connectors to enable data transmission to connected tools.

## Accessories

Part #	Product Description
BRACKET-10	Bracket connects to one side of the INT1G10CSA and allows you to add (2) portable TAPs in a 1U rack.
SFPSX_T	SFP 1000 Base-SX Multi-Mode Fiber LC Connector, TAA Compliant
SFPTX_T	SFP 10/100/1000 Copper RJ-45 Connector, TAA Compliant
SFPLX_T	SFP 1000Base-LX Single Mode Fiber LC Connector, TAA Compliant



## **Have Questions?**

sales@garlandtechnology.com | +1716.242.8500 GarlandTechnology.com

